



United States Patent Application Serial No. 09/691,583

For 'Improvements in or relating to bells'

in the name of Neil Maxwell McLachlan et al

Declaration to Traverse Rejection under 37 CFR § 1.132

I, Neil Maxwell McLachlan of 11 Brockenshire Street, Clifton Hill, Victoria 3068, do solemnly and sincerely declare as follows:

- 1. I am an acoustic designer and an inventor of the invention disclosed and claimed in patent application USSN 09/691,583, for 'Improvements in or relating to bells'.
- 2. I make the following statement in order to attest that harmonic bells in accordance with the claims of the patent application – previously commonly thought by experts in the field of acoustics to be an impossibility – have now been manufactured and tested. I was closely involved in the design, manufacture, testing and installation of these bells.
- 3. Harmonic bells in accordance with claim 1 (A bell having a plurality of modal frequencies, wherein the first three frequencies are substantially in an harmonic sequence) and other claims of the application presently on file have now been designed and manufactured with less than 2% error for up to the first seven partial frequencies. These have already been used in a number of musical contexts in Melbourne, Australia.
- 4. Harmonic bells ranging in mass from around 1000kg to less than 1 kg are included in a permanent outdoor installation of electro-mechanically struck bells in a public park in central Melbourne, Australia. These bells are struck by a variety of mallet materials ranging from steel pins for the smaller bells to metal mallets with hard nylon striking surfaces for the larger bells. They are controlled by MIDI programs and can be played with a range of mallet velocities.
- Over 2,000 harmonic handbells and a two-octave set of larger harmonic bells for the Melbourne Symphony Orchestra were produced for performances to celebrate the centenary of Australia's federation in 2001.

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AND I MAKE this solemn declaration conscientiously believing the statements therein to be true and correct and I make it in the belief that a person making a false Statutory Declaration is liable to the penalties of perjury.

DECLARED AT MELSOURNE VICTORIA

this SKIEENTH day of January 2003

Neil Maxwell McLachlan

Before me ..

CHRISTOPHER J. BIRD REGISTERED PATENT ATTORNEY 530 COLLINS STREET MELBOURNE VIC 3000